Patterson Schafer, Incorporated



VIA FACSIMILE TRANSMITTAL

MC: P.T. J.D.B

November 7, 1990

Mr. Joseph M. Grana
Manager of Environmental
and Energy Affairs
Cerro Copper Products Company
P.O. Box 66800
St. Louis, MO 63166-6800

Dear Joe:

As you know the piercing run has been rescheduled for November 15 and 16, 1990. Joe Burroughs and Ebrahim Khalili have been coordinating with Chester Engineers to solve several of the problems which occurred during the last run.

The major problem was in balancing the flow of water to and from the treatment unit operations. Level activated pump switches had not been installed. These have been added to the system. A second problem, with the continuous backwash strainer has also been corrected. However, the entire treatment system has not been tested since the last run.

One option we should consider is changing the location of the millwater tank pump, P601. Because the millwater tank can overflow, P601 is vulnerable. In fact one motor has been damaged because it got wet. Thus P601 should either be located above grade or replaced with a submersible pump. It must be noted that if the millwater pump is lost during a piercing run, the run must be stopped. There is no alternate means of transferring water to the treatment process. Thus the following schedule to ensure the system works properly is proposed.

Joe Burroughs and I will fully test the current system on Friday, November 9. We will thus have one week to solve any additional problems and/or make necessary adjustments. I will return to Cerro on Wednesday, November 14 to assist Joe and Chester Engineers in beginning the next start-up process.

Mr. Grana November 7, 1990 Page 2

Because of the operating schedule outlined in Cerro's Consent Decree, we must assure the treatment plant can function properly before the next piercing run. Please note we have used one of our "non-required reporting" days.

If I can be of further assistance, please call.

Cordially,

Edward J. Cooney Project Engineer

cc: J. Lucey

C. Brence

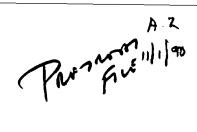
J. Burroughs

J. Patterson

C. Schafer

E. Khalili

EJC/kc



November 1, 1990

Hayward Industrial Products, Inc. 900 Fairmount Avenue P. O. Box 18 Elizabeth, NJ 07207

RE: Series 596 Automatic Self-Cleaning Strainer

Attention: Bill Brube

Dear Mr. Brube:

We recently received and installed an automatic backwash strainer supplied by Hayward under our Purchase Order 77397. This order was issued as a result of Hayward Proposal 90/083 and the unit was manufactured on Hayward Order 62561. In starting up the system we experienced difficulties which were caused by the improper installation of the strainer.

Hayward local representative, Bob Carr of Industrial Process Equipment Company in St. Louis, worked with our personnel part of one day and all of the next. During the course of the visit he had several telephone conversations with Hayward personnel in attempting to resolve the problem. Cerro took it upon themselves to finally open the unit to inspect the internals for damage or excessive plugging of the screen. It was noticed that the buildup on the screen had occurred on its outside, not on the inside as designed. We then looked at the housing and it was determined that the inlet flow was to the outside of the screen and not to the inside as designed, and the factory attached label for the inlet was incorrectly mounted on the housing of the discharge flange.

The labor necessary to reverse the unit can be clearly delineated. Cerro expects the cost of labor to reverse the strainer to be covered by Hayward. Additionally, personnel involved in attempting to resolve the problem included two engineers from Cerro, two field engineers from Chester Engineers (design and construction consultant), and an engineer from Patterson Schafer, Inc. (our environmental consultants) along with Mr. Carr here on hand for startup. The consultants were at the facility on an hourly contractual basis for startup but because of delays resulting from the strainer, startup was impossible. Cerro will also expect Hayward to pick up their charges.

Cerro will gather all charges and the cost involved and forward them to your office at a later date.

CERRO COPPER PRODUCTS CO.

Hayward Industrial Products, Inc. Attn: Bill Brube November 1, 1990 Page 2

The unit does appear to function properly when correctly installed. The efforts by Mr. Carr in attempting to resolve the problem were commendable, but even with his long experience in handling your equipment he was unable to anticipate such an error.

Sincerely,

CERRO COPPER PRODUCTS CO.

Joseph M. Grana Manager of Environmental and Energy Affairs

. JMG/ge

cc: Bob Carr, Industrial Process Equipment Co. James Patterson, Patterson Schafer, Inc. John Lucey, The Chester Engineers

bcc: P. Tandler
J. Burroughs
D. Durham
File